74047

ED STATES PATENT AND TRADEMARK OFFICE

U.S. Patent No .:

5,957,050

Issued:

September 28, 1999

Applicants/Inventors:

Bruce A. Scheffer et al.

Serial No.:

09/161,194

Filed:

For:

September 25, 1998

METHOD AND APPARATUS FOR

EFFECTING SHINGLING OF **CONVEYED PRINTED PRODUCTS**

I hereby certify that this paper is being

deposited with the United States Postal Service as first class mail in an envelope addressed to:

Commissioner for Patents, Washington, DC

Registration No.: Attorney for Applicant(s)

20231, on this date:

Date

OF CORRECTION

REQUEST FOR CORRECTED CERTIFICATE **OF CORRECTION UNDER 37 C.F.R. § 1.322**

Commissioner for Patents Washington, D.C. 20231 Attn: Michelle Williams

Certificate of Correction Department

Dear Ms. Williams:

The below signed attorneys for the Assignee of U.S. Letters Patent No. 5,957,050 (the '050 patent) have received a paper entitled NOTICE REGARDING REQUEST FOR CERTIFICATE OF CORRECTION (hereinafter "the NOTIFICATION" -- copy enclosed) responsive to applicants' REQUEST FOR CERTIFICATE OF CORRECTION UNDER 37 C.F.R. § 1.322 mailed to the PTO on 12/02/99 (copy enclosed).

The NOTIFICATION indicates that Col. 11, line 54, to Col. 13, line 4, of U.S. patent No. 5,957,050 "is printed in accordance with the record". It is respectfully requested that the position taken in the NOTIFICATION be reconsidered.

During prosecution of the divisional application that issued as the '050 patent, a PRELIMINARY AMENDMENT was filed simultaneously with the divisional application, Serial No. 09/161,194. A copy of the PRELIMINARY AMENDMENT is enclosed. The first item under the heading "In the Claims" on page 4 of the PRELIMINARY AMENDMENT states: "Cancel claim 1 after granting a filing date to the subject divisional application". Claim 1 of the issued '050 patent is identical to claim 1 of the divisional application and should have been canceled in accordance with the PRELIMINARY AMENDMENT.

An amendment filed in the divisional application entitled AMENDMENT UNDER 37 C.F.R. § 1.312, forwarded to the PTO via Express Mail on July 7, 1999 (copy enclosed), also instructed on page 1 that claim 1 of the then pending divisional application be cancelled without prejudice.

Copies of the return postcards showing receipt in the PTO of the Preliminary Amendment, the Amendment Under 37 C.F.R. § 1.312 and the REQUEST FOR CERTIFICATE OF CORRECTION 37 C.F.R. § 1.322 are attached to their corresponding papers.

Thus, on two occasions during prosecution of the divisional application that issued as the '050 patent, cancellation of claim 1 in the pending application was requested. However, when the '050 patent was printed, claim 1 in the divisional application that had been expressly cancelled from the application was printed as claim 1 in the issued patent.

Accordingly, it is requested that a corrected or supplemental CERTIFICATE OF CORRECTION be issued making of record the aforedescribed printing error on the part of the Patent and Trademark Office in printing U.S. patent No. 5,957,050. A corrected or supplemental CERTIFICATE OF CORRECTION Form is enclosed.

Respectfully submitted,

WELSH & KATZ, LTD.

Richard L. Wood Reg. No. 22,839

Lichard Thood

October 13, 2000 Welsh & Katz, Ltd. 120 South Riverside Plaza - 22nd Floor Chicago, Illinois 60606

Phone: (312) 655-1500 Fax: (312) 655-1501



Cgc

NAME UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Bruce A. Scheffer et al.

Group No.:

3724

I hereby certify that this paper is being

Deposited with the United States Postal Service

as Express Mail in an envelope addressed to:

Assistant Commissioner for Patents,

Washington, DG 20231, on this dafe:

Serial No.:

Examiner:

Charles Goodman

Filed:

September 25, 1998

For:

METHOD AND APPARATUS FOR

EFFECTING SHINGLING OF

CONVEYED PRINTED PRODUCTS

9/25/98

Date

27 Express Mail No.

EM509547849US

Attorney

Docket No.:

74047

PRELIMINARY AMENDMENT

Box PATENT APPLICATION
Assistant Commissioner for Patents
Washington, DC 20231

Sir:

OF CORRECTION

Applicants through their undersigned attorneys, amend their above-identified divisional application as follows:

In the Specification:

Page 4, line 10, change "of" to --having--; delete "length" and insert --gaps between successive products--;

Same page, line 29, before "printed" insert --irregularly spaced--.

Page 5, line 1, before "printed" insert --irregularly spaced--.

Page 6, line 6, before "printed" insert --irregularly spaced--;

Same page 6, line 14, change "member" to --number--;

Same page, line 15, before "printed" insert --irregularly spaced--;

Same page, line 21, change "gaps" to --gap--;

Same page, line 35, delete "printing plate" and insert --knife-- therefor.

Page 8, line 20, after "of" insert --a modified embodiment of--.

Page 9, line 10, delete "comparing the manner of";

Same page, line 12, change "mace" to --made--.

Page 10, line 3, delete "As schematically illustrated in FIG. 10," and change "the" to --The--;

Same page, line 18, delete "the web" and insert --each press repeat--;

Same page, line 23, after "printer" add --, such as represented by printed products 26a-e of a first repeat length of web, and printed products 26'a and 26'b at the leading end of a second repeat length of the web--;

Same page, line 32, change "printer" to --cutter--.

Same page, line 10, delete "are rotatable in timed relation to the anvil cylinder 16 and";

Same page, line 12, after "cylinder" (second usage) insert --in a known manner--.

Page 12, line 4, change "pulley" to --roller--;

Same page, line 8, after "about" insert --a--; and change "pulleys" to --roller--;

Same page, line 9, after "and" insert --a roller--;

Same page, line 10, change "a" to --the--;

Same page, line 23, change "belts" to --belt--, insert a period (.) after "72", and delete "which preferably conform in number to the high speed";

Same page, line 24, delete "conveyor belts 54. Each of"; change "the" to --The--; and change "belts" (second usage) to --belt--;

Same page, line 25, change "pulley" to --roller--;

Same page, line 26, change "pulley" to --roller--;

Same page, line 30, after "idler" change "rollers to --roller--, and after "drive" change "rollers 74" to --roller 76--;

Same page, line 31, change "belts" to --belt--;

Same page, line 32, change "motor" to --roller--;

Same page, line 33, change "or" to --controlled--.

Page 13, line 1, change "pulleys" to --roller--; and change "are" to --is--;

Same page, line 4, change "belts" to --belt--;

Same page, lines 11, 12 and 13, change "rollers" to --roller--;

Same page, line 25, change "rollers" (second usage) to --roller--;

Same page, line 27, change "surfaces" to --surface--;

Same page, line 28, change "reaches" to --reach--;

Same page, line 33, change "rollers" to --roller--.

Page 14, line 19, change "blade" to --blades--;

Same page, line 36, delete "printing plate cylinder with which" and insert --circular path traversed by the outer cutting edges of the knife blades carried on-- therefor; delete "and";

Same page, line 37, delete "delivery system 10 are used".

Page 15, line 34, change "a" to --as--.

Page 16, line 24, delete "bracket" and insert --pair of brackets 132a and 132b which are mounted on a plate-- therefor.

Page 21, In the Abstract, line 1, change "an" (second usage) to --and--.

In the Claims:

Cancel claim 1 after granting a filing date to the subject divisional application.

Cancel claims 2-6 without prejudice.

Add claims 7-22 as follows:

7. Apparatus for shingling successive sheet products cut from a substantially continuous web of sheet material, said apparatus comprising, in combination, a variable rotary cutter having a plurality of knife blades having cutting edges operative to cut the web generally transversely into irregularly spaced sheet products of substantially equal longitudinal lengths having leading and trailing edges, first conveyor means for receiving said sheet products in successive fashion from said rotary cutter and defining a first conveyor path along which said successive sheet products are conveyed in irregularly spaced relation at a first longitudinal speed, second conveyor means having an upstream end for receiving said sheet products in successive fashion from said first conveyor means and defining a second conveyor path along which said sheet products are conveyed at a slower longitudinal speed than said first longitudinal speed, knockdown means including at least one rotary knockdown wheel spaced above and generally adjacent said upstream end of said second conveyor means, said knockdown wheel having a plurality of knockdown members adjustable about an outer periphery of said wheel, said knockdown members being equal in number to the number of knife blades on said rotary cutter that establish said trailing edges of said irregularly spaced sheet products and being positioned about the outer periphery of said wheel so that outer surfaces of said knockdown members are operative to engage and depress successive sheet products generally adjacent their trailing edges as said irregularly spaced sheet products pass from said first to said second conveyor means whereby to enable shingling of successive sheet products, and means for rotating said knockdown wheel so that said outer surfaces

of said knockdown members have a tangential velocity substantially equal to the tangential velocity of said knife cutting edges during operation of said apparatus.

- 8. Apparatus as defined in claim 7 wherein said knockdown wheel has a center axis of rotation, said knockdown members being disposed in generally radial relation to said center axis.
- 9. Apparatus as defined in claim 8 wherein said knockdown members lie substantially in a common plane transverse to said axis of rotation of said knockdown wheel.
- 10. Apparatus as defined in claim 8 wherein said knockdown members include brush bristles defining said outer surfaces thereof.
- 11. Apparatus as defined in claim 7 including brake means for engaging an undersurface of the trailing edge of each successive sheet product as it is engaged by a knockdown member so as to assist in decelerating each said sheet product as it enters said second conveyor means.
- 12. Apparatus as defined in claim 7 including means for varying the rotational phase relation between said rotary cutter and said knockdown wheel so as to vary the point of engagement of said knockdown members with said sheet products relative to the trailing edges of said sheet products.
- 13. Apparatus as defined in claim 12 wherein said means for varying said rotational phase relation comprises a harmonic drive operatively associated with said rotary cutter and said knockdown wheel.
- 14. Apparatus as defined in claim 12 wherein said means for varying said rotational phase relation comprises a differential gear drive operatively associated with said rotary cutter and said knockdown wheel.

15. Apparatus as defined in claim 7 including headstop means operatively associated with said second conveyor means so as to engage a leading edge of each successive printed product and effect deceleration thereof as said product passes to said second conveyor means, said headstop means being positioned to be engaged by the leading edge of a printed product when the trailing edge of said product is adjacent the upstream and of said second conveyor means.

A system for producing printed sheet products, comprising, in combination, a rotary 16. print cylinder operative to produce a plurality of printed products on a continuous length longitudinally moving web during each repeat of the print cylinder, a variable rotary knife cylinder downstream from said print cylinder and operative to sever the web generally transversely so as to create individual irregularly spaced printed products having leading and trailing edges, a first conveyor operative to receive said individual irregularly spaced printed products from said knife cylinder and convey said printed products at a first speed, a second conveyor operative to receive said irregularly spaced printed products from said first conveyor and convey said products at a slower speed than said first speed, headstop means operatively associated with said second conveyor for cooperation with each successive printed product to momentarily decelerate movement of each said successive printed product received from said first conveyor when the trailing edge of each said printed product is adjacent an upstream end of said second conveyor, and at least one knockdown wheel supported adjacent said upstream end of said second conveyor, said knockdown wheel having a plurality of kicker members disposed about its periphery equal to, or a whole integer multiple of, the number of printed products created by said print cylinder during each repeat revolution thereof, said knockdown wheel being positioned and rotated so that each kicker member engages the trailing edge of a printed product when the leading edge of said printed product engages said headstop means to facilitate shingling of successive printed products passing from said first to said second conveyor.

- In a delivery system for receiving a printed web from a rotary print cylinder 17. operative to print a plurality of equal length irregularly spaced printed products on each repeat length of the web, said system further including a variable rotary knife cylinder having a plurality of knife blades thereon positioned to sever each said repeat length of web so as to create irregularly spaced individual equal length printed products having leading and trailing edges, a first conveyor for conveying said individual printed products from said knife cylinder along a predetermined path at a first speed, and a second conveyor having an upstream end adapted to receive said printed products from said first conveyor and convey said products at a speed less than said first speed; the combination therewith comprising at least one knockdown wheel having a generally circular periphery and a center axis of rotation, said knockdown wheel having a plurality of knockdown elements supported about said periphery equal in number to the number of knife blades on said knife cylinder that establish said trailing edges of said printed products severed from said web, said knockdown wheel enabling adjustable positioning of said knockdown elements about said periphery in angular circumferential positions corresponding to the angular circumferential positions of said knife blades that establish said trailing edges, and means for supporting said knockdown wheel adjacent said upstream end of said second conveyor for rotation about said center axis in rotational phase relation to rotation of said knife cylinder such that said knockdown elements depress each successive printed product generally adjacent its trailing edge as said irregularly spaced printed products pass from said first to said second conveyor.
- 18. The system as defined in claim 17 including at least one headstop roller cooperative with said second conveyor to define a nip operative to receive the leading edge of each successive printed product passing from said first to said second conveyor, said nip being operative to reduce

the speed of each successive printed product entering said nip when the trailing edge of said printed product underlies said knockdown wheel preparatory to being engaged by one of said knockdown elements.

19. Apparatus for making a plurality of printed products from a continuous web comprising, in combination, a rotary print cylinder, means for effecting cooperation between the web and said print cylinder so as to create a plurality of generally equal length printed products on a repeat length of the web during each rotational repeat of said print cylinder and wherein the printed products are irregularly spaced between a leading edge and a trailing edge of each repeat length of web, a rotary cutter having knife blades thereon, means for effecting cooperation between said repeat length of web and said variable rotary cutter so that said knife blades sever the web and create discrete irregularly spaced equal length printed products having leading and trailing edges, first conveyor means for conveying the severed irregularly spaced printed products from said rotary cutter along a first conveyor path at a first speed, second conveyor means for conveying the severed irregularly spaced printed products from said first conveyor path along a second conveyor path at a second speed less than said first speed, said second conveyor path having an upstream end positioned to receive said severed irregularly spaced printed products from said first conveyor path, and at least one knockdown wheel having an axis of rotation and a generally circular periphery and having a plurality of knockdown elements adjustable about said periphery, said knockdown elements being equal in number and positioned at substantially corresponding angular positions about said axis of rotation as are said knife blades on said rotary cutter that create said trailing edges of said printed products severed from said repeat length of said web, said knockdown wheel being positioned generally adjacent said upstream end of said second conveyor path so that effecting rotation of said wheel about said axis of rotation in predetermined phase relation to said rotary

cutter causes said knockdown elements to each engage a discrete printed product received from said first conveyor path generally adjacent its trailing edge to enable the leading edge of each successive printed product received from said first conveyor path to pass over the trailing edge of the preceding printed product in shingled fashion.

- 20. In apparatus for conveying irregularly spaced printed products from a first conveyor to a second conveyor traveling at a slower speed than the first conveyor, and wherein said printed products have leading and trailing edges and are formed by a rotary cutter from predetermined equal lengths of a continuous web so that each predetermined length of web has an equal number of irregularly spaced equal length printed products formed therefrom; the improvement comprising a knockdown wheel supported adjacent an upstream end of the second conveyor and operative to engage the trailing edge of each successive printed product as it is conveyed from said first to said second conveyor, said knockdown wheel having an axis of rotation and a substantially circular periphery, and a plurality of knockdown elements mounted on said periphery so as to enable selective angular adjustment of said knockdown elements about said axis of rotation, said knockdown elements being equal in number to the number of said printed products formed from each said predetermined length of web and being positioned so that upon rotating said knockdown wheel in predetermined phase relation to said rotary cutter, said knockdown elements engage said trailing edges of said irregularly spaced products conveyed from said first to said second conveyor.
- 21. A method for making a plurality of printed products from a continuous web, comprising the steps of:

effecting cooperation between the web and a rotatable print cylinder so as to create a plurality of generally equal length printed products on a repeat length of the web during each rotational repeat of said print cylinder and wherein the printed products are irregularly spaced

between a leading edge and a trailing edge of each repeat length of web,

effecting cooperation between said repeat length of web and a variable rotary cutter having knife blades operative to sever the web so as to create discrete generally equal length irregularly spaced printed products having leading and trailing edges,

conveying the severed irregularly spaced printed products from said rotary cutter along a first conveyor path at a first speed,

conveying the severed irregularly spaced printed products from said first conveyor path along a second conveyor path at a second speed less than said first speed, said second conveyor path having an upstream end positioned to receive said severed printed products from said first conveyor path,

providing at least one knockdown wheel having a center axis and a generally circular periphery and having a plurality of knockdown elements adjustable about said periphery to correspond in number and angular relation to said knife blades on said rotary cutter that create said trailing edges of said irregularly spaced printed products severed from a repeat length of said web, and

positioning said knockdown wheel generally adjacent said upstream end of said second conveyor path and effecting rotation of said wheel about said center axis so that each of said knockdown elements engages a discrete printed product received from said first conveyor path generally adjacent its trailing edge so as to enable the leading edge of each successive printed product received from said first conveyor path to pass over the trailing edge of the preceding printed product in shingled fashion.

22. A method for shingling printed products made from a continuous web having printed products formed thereon by a rotary print cylinder so that, for a repeat length of the web

having a leading end and a trailing end, a plurality of equal length printed products are irregularly spaced along said repeat length to create a waste strip at either said leading or trailing end thereof, said method comprising the steps of:

effecting cooperation between said repeat length of web and a rotary cutter having knife blades operative to sever the web and create discrete equal length, irregularly spaced printed products having leading and trailing edges,

conveying said discrete irregularly spaced products from said rotary cutter along a first conveyor path at a first speed to a second conveyor path operative to convey said products at a second speed less than said first speed, said second conveyor path having an upstream end positioned to receive said products from said first conveyor path,

providing at least one rotatable knockdown wheel having a plurality of knockdown elements adjustable about a rotational axis of said wheel so that said knockdown elements correspond in number and angular relation about said rotational axis to said knife blades on said rotary cutter that create said trailing edges of said printed products, and

positioning said knockdown wheel generally adjacent said upstream end of said second conveyor path and effecting rotation of said wheel so that each of said knockdown elements momentarily engages a discrete printed product adjacent its trailing edge as said product is received from said first conveyor path to enable the leading edge of the next successive printed product received from said first conveyor path to pass over said momentarily engaged trailing edge in shingled fashion.

This Preliminary Amendment accompanies a Petition to Make Special Under 37 C.F.R. § 1.102(d) that encloses prior patents known to applicants' and that may be material to examination of above claims 7-22. The prior patents comprise applicants' Information Disclosure Statement Under

37 C.F.R. 1.56, 1.98 and 1.99, and a Form PTO-1449 is enclosed with the Petition to make Special.

Applicants' claims 7-22 as presented herein are believed to be allowable over the prior art known to applicants, and their allowance is earnestly solicited.

Respectfully submitted,

WELSH & KATZ, LTD.

Richard L. Wood

Reg. No. 22,839

September 25, 1998 WELSH & KATZ, LTD. 120 South Riverside Plaza 22nd Floor Chicago, IL 60606 Phone: (312) 655-1500

Fax: (312) 655-1501

In Re Divisional Patent Application of Bruce A. Scheffer et al. METHOD AND APPARATUS FOR EFFECTING SHINGLING OF CONVEYED PRINTED PRODUCTS

RLW/gmb #74047

Utility Transmittal; Fee Transmittal (in duplicate); \$600.00 Check (filing fee); Petition to Make Special (with 11 patents); \$130.00 check (petition fee); Preliminary AmendmentIDS; Form PTO-1449; Copy of originally filed application; Copy of executed Declaration

Please acknowledge receipt of the above identified documents by applying the Patent and Trademark Office receipt hereto and mailing this card.

09/161194 PTO

Respectfully,

WELSH & KATZ, LTD.

Applicant:

Bruce A. Scheffer et al.

Group No.:

2854

Serial No.:

09/161,194

Batch No.:

Z99

Filed:

September 25, 1998

Examiner:

Eugene Eickholt

For:

METHOD AND APPARATUS FOR

EFFECTING SHINGLING OF

CONVEYED PRINTED PRODUCTS

I hereby certify that this paper is being Deposited with the United States Postal Service as Express Mail in an envelope addressed to: Assistant Commissioner for Patents,

Washington, DC 20231, on this date:

Attorney

Docket No. 74

74047

7/7/1999 Date

Express Mail No.

EM509795559US

AMENDMENT UNDER 37 CFR § 1.312

Box ISSUE-FEE Assistant Commissioner for Patents Washington, DC 20231

Sir:

Applicants, through their undersigned attorneys, respectfully request amendment of their above-identified patent application as follows to place the application in condition for issuance.

In the Claims:

Cancel claim 1 without prejudice.

REMARKS

The Notice of Allowability dated 05/20/99 indicates that claims 1 and 7-31 are allowed. However, claim 1 was cancelled, along with cancellation of claims 2-6, in applicants' Preliminary Amendment filed 9/25/98.

Cancelled claims 1-6 were prosecuted in the parent application, Serial No. 08/496, 822, from which the subject application is a divisional application.

Submitted herewith is a Supplemental Declaration signed by all of the applicants.

This amendment is being filed simultaneously with payment of the Issue Fee. Because this application has been made <u>SPECIAL</u>, expedited issuance of Letters Patent incorporating claims 7-31 is earnestly solicited.

Respectfully submitted,

WELSH & KATZ, LTD.

Bv

Richard L. Wood

Registration No. 22,839

July 7, 1999 WELSH & KATZ, LTD. 120 South Riverside Plaza 22nd Floor Chicago, IL 60606 Phones (212) 655, 1500

Phone: (312) 655-1500

Fax: (312) 655-1501

Scheffer et al.
METHOD AND APPARATUS FOR EFFECTING SHINGLING
OF CONVEYED PRINTED PRODUCTS
Serial No. 09/161,194; Filed 9/25/98; Batch No. Z99

RLW/gmb #74047 7/7/99 7/7/99

Fee Transmittal (in duplicate), Issue Fee Transmittal, \$605.00 check (issue fee); Amendment Under 37 CFR § 1.312 and Supplemental Declaration for Utility or Design Patent Application (38 CFR 1.63)

Sir:

Please acknowledge receipt of the above identified documents by applying the Patent and Trademark Office receipt hereto and mailing this card.

JUL 0 7 1999

Respectfully,

WELSH & KATZ, LTD.



UNITED ST. S DEPARTMENT OF COMMERCE Patent and Trademark Office
ASSISTANT SECRETARY OF COMMERCE AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

Rcw/675 24047

17 / // 9:35

Richard L. Wood
Welsh & Katz
120 South Riverside Plaza – 22nd floor
Chicago, IL 60606

MAILING DATE 4	-24-00
PATENT NO. 5,957,050	PATENT DATE: September 28, 1999
PATENTEE: Scheffer, et	al
ATTORNEY DOCKET NO).

NOTIFICATION REGARDING REQUEST FOR CERTIFICATE OF CORRECTION

The Certificate of Correction requested in the patent identified above has been APPROVE corrected as requested. The Certificate, so modified, will be issued on	ED with the exception indicated below. The remaining errors will be
A. THE CHANGES BELOW CANNOT BE INCLUDED IN THE CERTIFI	ICATE SINCE THE REQUEST WAS FILED UNDER RULE 322:
1. Column 11, line 54 to column 13, line 4, and column 11-18, claims 2-26,	, is printed in accordance with the record.
(a) The change referred to was initialed and dated by applicant before	execution of the application papers.
2. In column, line, the error resulted from applic of the amendment was omitted.	cant's failure to comply with Rule 121(a), in that the precise point of entry
3. In column, line, the alleged error is due to appli use of <u>brackets</u> , instead of parentheses, to cancel subject matter and for the	icant's failure to comply with Rule 121(b), wherein provision is made for use of <u>interlineations</u> to indicate new subject matter.
4. Omission of the priority data from the patent resulted from applicant's failu	are to fully comply with 35 U.S.C. 119, in that:
(a) The priority data was omitted from the oath, or declaration	
(b) The claim for priority was not included in the application papers.	2000
(c) The certified copy of the foreign application was not filed.	WH JEE
5. Since, the inventor name(s) is/are printed in accordance with the type writt granted (See Petition filing information below).	ten signature, no correction is in order here; unless a petition is
6. The assignment data is printed in the patent in accordance with PTO-85b, s issue fee, no correction is in order here, unless a petition is granted (See Pe	
Any petition should be directed to the attention of the Assistant Commission	er for Patents, using the following mailing address or FAX number.
By Mail: Commissioner of Patents and Trademarks Box DAC Washington, D.C. 20231	OR By FAX: (703) 308-6916 Attn: Office of Petitions
7. In column, line, the error arose because Rule 1.52(of certain pages were obliterated or not legible causing the Office to provide	
B. THE REQUEST HAS BEEN CHANGED AS SHOWN BELOW TO COM	WPLY WITH THE RECORD:
1. The error complained of in column, line, occurre	ed in column, line, where the changes will be made.
2. The change requested in has been modified by:	

سبع	4	Ú	
	(2.	THE FOLLOWING CORRECT LON(S) CANNOT BE INCLUDED IN THE CERTIFICATE FOR THE REASONS GIVEN BELOW:
			The word, purported to be in column, line, cannot be found in the printed patent.
			The alleged error in column, line, is an editing change made in accordance with the style of the Invention Patent Manual.
	3	3.	In column, line, the alleged error is in fact a change made by the examiner and considered to be in accordance with the permissible amendments enumerated in M.P.E.P. 1302.04.
	4	1 .	In the title, it is the practice to exclude words such as "Improvements in", "New", "A", "Novel", etc., from the printed patent.
			Comparison of the patent in column, line, with the corresponding location in the application file reveals that there is no discrepancy.
	l		The numbering of the claims and their dependency in the printed patent is in accordance with the renumbering of dependent claims by the examiner as as described in M.P.E.P.608.01(n).
		7.	The alleged error in column, line, is a change made in an Examiner's Amendment at time of allowance. Since no error is involved and since applicant filed no objection prior to payment of the base issue fee, the requested change will not be included in the Certificate.
		8.	The error complained of in column, line, cannot be corrected since:
			ONAL CORRECTIONS:
E. UI	не	K	(Fee not enclosed):
FOR A	ADE)I	FIONAL INFORMATION REGARDING THIS NOTIFICATION PLEASE CONTACT:
		C	fichelle Williams Pertificates of Correction 703) 305-8309
WITH	IIN	4 '	WEEKS FROM MAILING DATE OF THIS NOTIFICATION
Su	berv	iso	or, Certificates of Correction Branch

This decision is rendered pursuant to authority delegated by the Solicitor under authority delegated to him by the Commissioner of Patents and Trademarks.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

U.S. Patent No.:

5,957,050

Issued:

September 28, 1999

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents, Washington, DC 20231, on this date:

Inventors:

Scheffer et al.

Date Registration No.:

Attorney for Applicant(s)



REQUEST FOR CERTIFICATE OF CORRECTION UNDER 37 C.F.R. § 1.322

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

The following listed printing errors on the part of the Patent and Trademark Office have been noted in United States Letters Patent No. 5,957,050, and the owner of the patent, through its undersigned attorneys, respectfully requests issuance of a Certificate of Correction.

Column 11, line 54, to Column 13, line 4; claim 1 should not appear in the issued patent.

(Preliminary Amendment, top of page 4; see also Amendment Under 37 CFR § 1.312 filed July 7, 1999)

Column 15, line 48, "chase" should read ---phase--.

(Supplemental Preliminary Amendment, claim 21, line 23, filed January 27, 1999).

Column 16, line 46, "tat" should read --that--.

(Supplemental Preliminary Amendment, claim 23, line 14, filed January 27, 1999).

Columns 11-18, claims 2-26, should be numbered claims 1-25, respectively, and their respective dependencies changed accordingly.

(Claims 2-26 are improperly numbered due to failure of the Office to cancel claim 1 as directed.)

Since the errors occurred on the part of the Patent and Trademark Office, no expense should be incurred by the patent owner for the requested Certificate of Correction.

Respectfully submitted,

WELSH & KATZ, LTD.

By

Richard L. Wood Reg. No. 22,839

December 2, 1999 Welsh & Katz, Ltd. 120 South Riverside Plaza 22nd Floor Chicago, Illinois 60606

Phone: (312) 655-1500 Fax: (312) 655-1501

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 5,957,050

DATED

September 28, 1999

INVENTOR(S):

Scheffer et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 11, line 54, to Column 13, line 4; claim 1 should not appear in the issued patent.

Column 15, line 48, "chase" should read --- phase--.

Column 16, line 46, "tat" should read --that--.

Columns 11-18, claims 2-26, should be numbered claims 1-25, respectively, and their respective dependencies changed accordingly.

MAILING ADDRESS OF SENDER:

PATENT NO.

5,957,050

Richard L. Wood, Esq. WELSH & KATZ, LTD. 120 South Riverside Plaza - 22nd Floor Chicago, IL 60606

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 5,957,050

DATED : September 28, 1999

INVENTOR(S): Scheffer et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 11, line 54, to Column 13, line 4; claim 1 should not appear in the issued patent. Column 15, line 48, "chase" should read ---phase--.

Column 16, line 46, "tat" should read --that--.

Columns 11-18, claims 2-26, should be numbered claims 1-25, respectively, and their respective dependencies changed accordingly.

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